### **MEPRS:** Our Cost **Accounting System**

#### Data Quality Course



**Deirdre Baker** TMA / MEPRS Program Office Management Management Control and Financial Studies

# Objectives

By the end of this presentation, you will:

- Understand the history and purpose of MEPRS
- Recognize the elements that comprise the MEPRS account structure
- Be familiar with the expense allocation process
- Understand how data quality affects MEPRS and be aware of the tools available to improve data quality
- Be able to locate and research MEPRS related information associated with the DQ Management Control Review List

### Introduction

• MEPRS: Medical Expense and Performance Reporting System

#### Origin of MEPRS:

Evolved from two historical systems
the Uniform Chart of Accounts (UCA), and
the Uniform Staffing Methodologies (USM)

-The UCA focused on tracking expenses and the USM was concerned with manpower resources

-In January 1985, the two systems were combined and the "MEPRs System" was born.

### Introduction

#### • Purpose:

- -Provide <u>uniform reporting</u> of expense, manpower, & workload for DoD Medical Treatment Facilities (MTF)
- MEPRS is a system of <u>manpower</u>, <u>cost distribution</u> and <u>expense reporting</u> that provides management with a basic framework for cost and work center accounting.
  Standardized reporting by Functional Cost Code (FCC)
- MEPRS = Information
- EAS = the hardware and software in which the information resides.

## Introduction

MEPRS Data: DoD-Standardized, Aggregated by FCC • Service-specific financial data •Army: STANFINS •Navy: STARS/FL •Air Force: BAFS Service-specific <u>personnel</u> data Army: UCAPERS •Navy: SPMS •Air Force: AF Personnel Sub-System of EAS Workload •CHCS / WAM

EAS IV Repository Access via Business Objects

EAS IV Repository DoD- Standardize MEPRS Data

#### WAM

EAS IV

Service Financial System

•O&M Expense•Civilian Salary•Obligation data•PEC data

Composite Health Care System (CHCS)

- Admissions/Discharges
- •Bed Days
- •Visits

EAS IV

Ancillary Workload

Service Hisonnel Stem • Manpower da • MILPERS



# **Financial Data**

•Kinds of Dollars -Pay Data •Military •Civilian -Contracts -Supplies -Equipment -Base Operations -Depreciation



8

## **Financial Data**

#### • Pay Source Differences -<u>Military Pay</u>

Service-specific Composite Military Pay Tables
Special Pays not medical-unique

#### -Civilian Pay

- •Army / Navy use actual pay from Service financial system
- •Air Force uses Composite Civilian Pay Tables

## Financial Data

#### DoD-standardized financial data

DoD	Air Force	Army	Navy
SEEC - Standard	EEIC - Element of		
Expense Element	Expense	EOR - Element of	EE - Expense
Code	Investment Code	Resource	Element
		AMSCO - Army	
PEC - Program	PEC - Program		SAG - Subactivity
Element Code	Element Code	Structure Code	Group



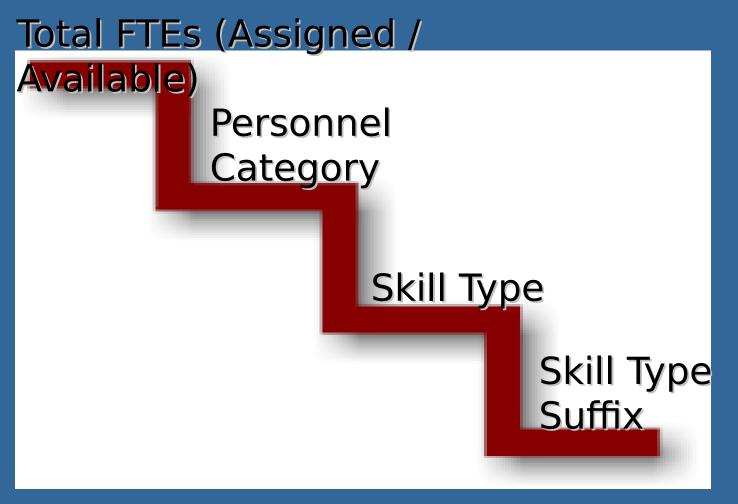
Service-specific pure financial data are also available in the EAS IV Repository

### Personnel Data

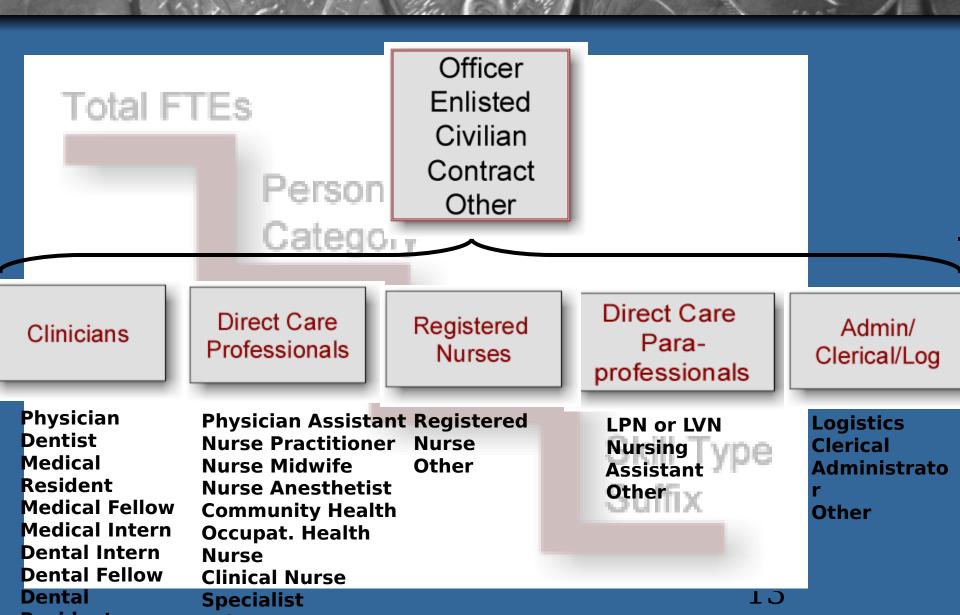
• Full Time Equivalent (FTE)

- Amount of labor available to the MTF work center if a person works 1 month
- -168 Man-Hours = 1 FTE
  (Avg. 21 Days/Month x 8 Hours)
- Assigned FTEs
  - -Listed on facility manning documents
- Available FTEs
  - Includes assigned, attached, borrowed, contracted, volunteers
- Non-Available FTEs
  - -Annual Leave, Sick Leave

### Personnel Data



## Personnel Data



# Workload Data

 With few exceptions (e.g., biomedical equipment repair), the source of MEPRS workload data is CHCS

 The Workload Assignment Module (WAM) of CHCS automates the interface with EAS and includes beneficiary category and Current Procedural Terminology (CPT) data

# Workload Data

#### Inpatient Services (A)

- -Admissions
- -Dispositions
- -Occupied Bed Days
- -Bassinet Days

#### • Ambulatory Services (B)

- -Ambulatory Visits
- -Evaluation & Management (E&M) Codes
- -CPT Codes

# Workload Data

 Ancillary Services (D) -Raw and Weighted Procedures -Minutes of Service (Surgical Services) -Hours of Service (ICU) -CPT-4 Codes (EAS IV) • Special Programs (F) -Immunizations -Visits

### MEPRS Account Structure (Functional Cost Codes)

#### Functional Cost Codes (FCCs)

- 4-letter MTF-specific codes representing work centers or reporting facilities; used to track costs, workload and FTEs
- First 3 letters are DoD-standard
- •The first letter identifies the type of service provided:
  - A Inpatient Care
  - B Ambulatory Care
  - C Dental Care

- **D** Ancillary Services
- E Support Services
- **F** Special Programs
- G Medical Readiness

#### Functional Cost Codes (FCCs)

- The second letter identifies Summary Accounts within MTF functional categories:
  - -B = AMBULATORY CARE
    - BA = Medical Care
    - BB = Surgical Care
    - BC = Obstetrical//Gynecological Care
    - BD = Pediatric Care
    - BE = Orthopedic Care
    - BG = Family Practice Care
    - BH = Primary Medical Care

#### Functional Cost Codes (FCCs)

- The third letter identifies particular work centers within Summary Accounts:
  - B = AMBULATORY CARE
    - BH = PRIMARY MEDICAL CARE
      - BHA = Primary Care Clinics
      - BHB = Medical Examination Clinic
      - BHC = Optometry Clinic
      - BHE = Speech Pathology Clinic
      - BHF = Community Health Clinic
      - BHG = Occupational Health Clinic

- Functional Cost Codes (FCCs)
- The fourth letter is MTF-unique and used to identify specific types of costs and workload:
  - B = AMBULATORY CARE
    - BH = PRIMARY MEDICAL CARE
      - BHA = Primary Care Clinics
        - BHAA = Primary Care Clinic Parent Facility

• BHAM\* = Primary Care Clinic - TMC-1 \*Note: A value of "5" in the 4<sup>th</sup> position is reserved for • BHAW\* = Primary Care Clinic - TMC-5 Ambulatory Procedure Visits (APV) costs and



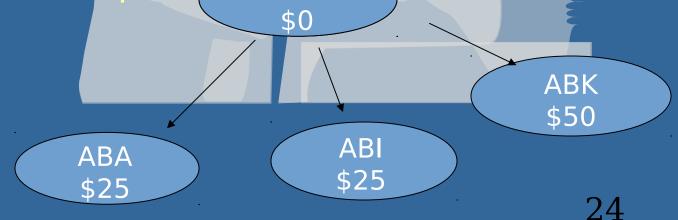
#### •Cost Pools

- -Cost pools are identified with an "X" in the 3rd FCC position.
- -Used when time and expense cannot be specifically assigned because two or more work centers share space, personnel or supplies. For example, mixed wards.
- -Expenses and FTEs in cost pools are reassigned (purified) on the basis of workload.
- -Cost pools are purified in alphabetical order before allocation of support and ancillary expenses.

• Ward 3E has a supply closet shared by three specialties -- Cost Pool ABX (\$100)

-ABA - General Surgery (25 OBDs)

- -ABI Plastic Surgery (25 OBDs) -ABK - Urology (50 OBDs)
- Supply costs accumulated in ABX (\$100) are purified based on each specialty's proportional Ward 3E occupied (ABX (\$505))



#### **Expense Allocation**

#### • Final Operating Accounts

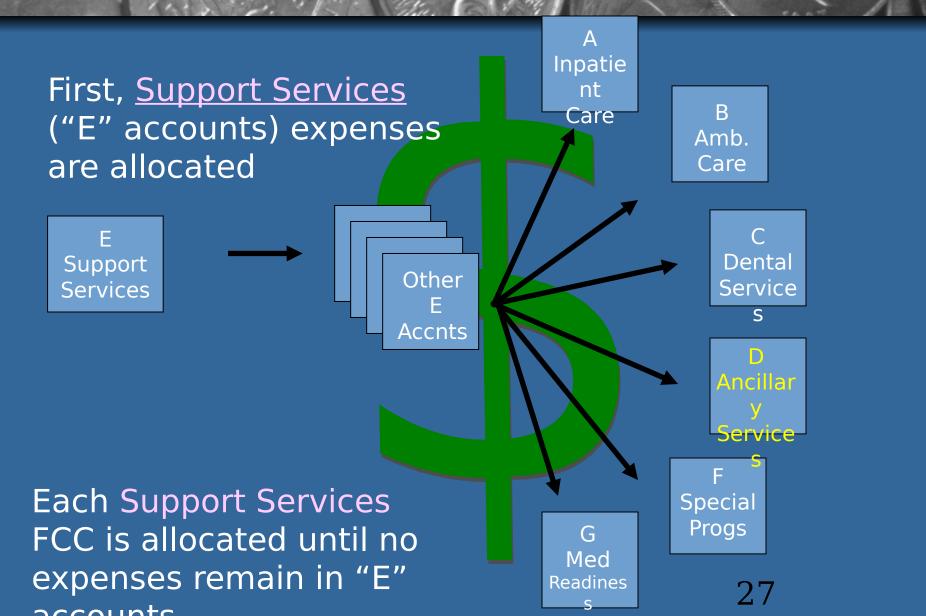
- A Inpatient Care
- B Ambulatory Care
- C Dental Care
- F Special Programs
- G Medical Readiness

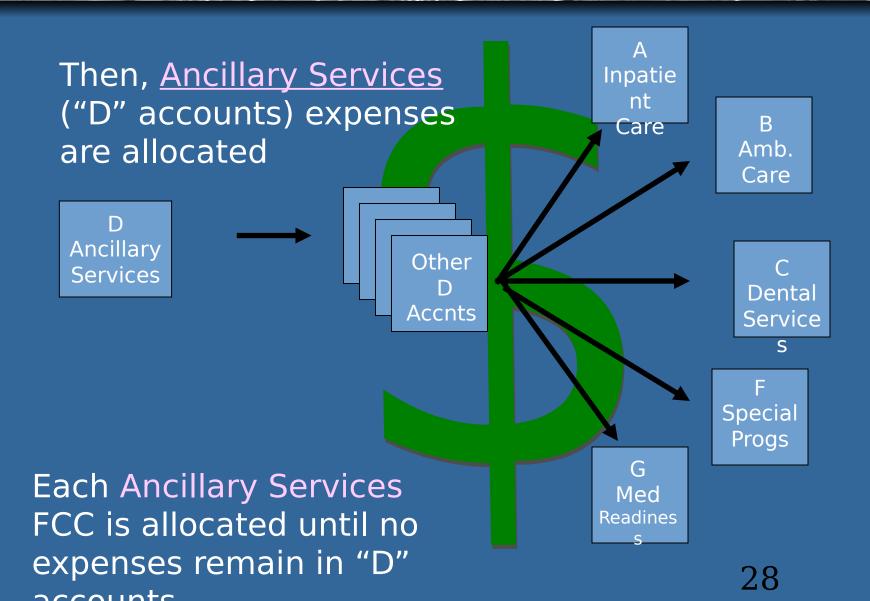
#### • Intermediate (Stepdown) Accounts

- D Ancillary Services
- E Support Services
- Ancillary and Support expenses are allocated (stepped-down) across final accounts

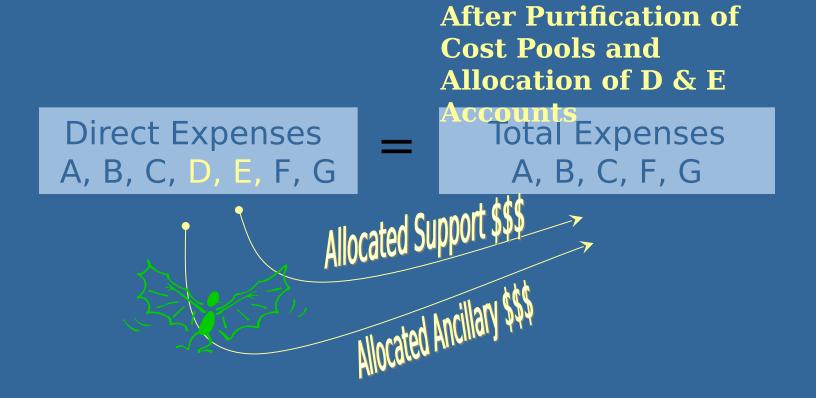
 Allocation (stepdown) of Support Services and Ancillary Services costs across final operating accounts

 Costs are allocated based on performance factors established by DoD 6010.13M
 Weighted procedures performed
 Hours / Minutes of Service performed
 Square footage cleaned





# Total Expenses



# Total Expenses

#### Total Expenses

#### **Business Objects Formula**

Direct Expense

- + Purified Expense
- + Stepdown Expense Contributed
- + Stepdown Expense from D
- + Stepdown Expense from E

#### = Total Expenses



### MEPRS Data Quality Challenge

- Data quality issues in MEPRS generally result from:
  - Insufficient vigilance or attention to data quality
  - Lack of effective education and training
  - Inconsistent implementation of policies, guidelines and business rules
  - System-related issues -- transmission or processing <u>errors</u>

### MEPRS Data Quality Challenge

Active Feedback and Continuous Process Improvement



#### Data-Based MEPRS Education



**EPPBS** 

MEPRS Data Surveillance and Management Metrics

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MEPRS Information Sharing Improved MEPRS Data Quality

MEPRS Policy and Busir Rules Oversight

### MEPRS Training, Education and Information Sharing



- Tri-Service MEPRS
   Application
- and Data Improvement (MADI)
- workshop FY05 attendance: 69
- 2005 Tri-Service MEPRS Conference 229 attendees



- MEPRS.INFOrmer is the new MEPRS quarterly newsletter launched 1Q FY04
- Updates MEPRS stakeholders on policy issues, data quality activities, and best practices for MEPRS process improvement



 MEPRS Conference Exhibit provides thousands of MHS personnel the opportunity to interact with centrally available MEPRS tools and metrics, and learn about resources available through the MEPRS Information Portal

### MEPRS Information Web Portal



- The www.MEPRS.INFO web portal is hosted at the
  - TRICARE web server www.tricare.osd.mil
- The MEPRS Information Portal is the gateway to MEPRS-related
   resources, including policy documents, learning materials, data
   quality surveillance tools, metrics, and much more
- Tri Convice utilization

# Surveillance and Management Metrics

-MEWACS provides monthly MEPRS data quality feedback, systematically highlighting potential MTF data anomalies

-Human Systems Interface (HSI) provides expert data quality and analysis assistance to field, serving as the link between MEPRS education and data quality surveillance initiatives.

Six Sigma MEPRS Management Metrics (S2M3)



Data Current as of: 22 Oct 2003



\*\*\* DRAFT \*\*\*

Click on a peer group below to view a specific metric

Rx Dispensing Costs	Assigned FTE per Daily Occupied Bed	Ratio of Support Personnel to Provider FTEs	Rx Workload per Rx FTE	Lab Workload per Lab FTE	Inpatient Costs per RWP	Ambulatory Costs per APG		
Medical Centers	Medical Centers	Medical Centers	Medical Centers	Medical Centers	Medical Centers	Medical Centers		
Large Hospitals	Large Hospitals	Large Hospitals	Large Hospitals	Large Hospitals	Large Hospitals	Large Hospitals		
Small Hospitals	Small Hospitals	Small Hospitals	Small Hospitals	Small Hospitals	Small Hospitals	Sm all Hospitals		
Clinics		Clinics	Clinics	Clinics		Clinics		
Executive Summary: Medical Centers Large Hospitals Small Hospitals Clinics	Medical Centers         Six Sigma Description           Large Hospitals         Definition of Metrics           Small Hospitals         Data Sources		External MEPRS Resor MEPRS Web Portal MEWACS MEPRS Manual DoD 6 Human System Interfar	010.13-M	MTF-Peer Group Lookup: <u>Air Force</u> Army Navy			

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MEDICAL EXPENSE & PERFORMANCE REPO		-0					. *		Real Property of	I K	ICA	×
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MEPRS Home	MTE Data	Trofilor										
Learning Resources		Tonics										
MEWACS	This tab display	s up to 24	fiscal month	s of descrip	tive data fo	r the followi	ng variables	: Dispositio	ns, Total Vis	its, Availabl	e FTEs, Ass	iç
Data Load Status	Direct Expense	s per Assig	ned FTE. For	additional i	nformation,	consult th	e MEWACS	Online Us	er's Guide	•		
Summary Outliers	Define Sear	ch Criter	ia									
MTF Data Profiles	Service:		All Se	rvices •								
WWR/EAS IV	Region/HS											
Allocation Test			DM:									
Allocation Detail	Parent DMI	SID:	-									
FCC3 Visit Cost			All 🔹									
FCC3 Disp Cost	FCC Code:		Show	All						-		
MTF Names	Press the "Su	hmit" hut			ur search	criteria or	"Contact I	ls" if you	have furth	er		
3rd Level FCC Codes	Press the "Submit" button after defining your search criteria or "Contact Us" if you have further questions.											
Executive Summary		Submit ?						Contact Us				
MEWACS User's Guide												
Download MEWACS-Excel												
MEPRS Management	Showing Re			GRP-ELM	ENDORF							_
Improvement Group (MMIG)	- 🕙 Downlo	ad as Exc	el File									l
Tri-Service Conference	Data Type	FY 2002 01	02	03	04	05	06	07	08	09	10	l
2 Quick Links MEPRS Newsletter	Dispositions		249	307	247	236	284	266	258	280	312	-
MEPRS Newsletter	Total Visits		245	00.		200	201	200	200	200	012	
(DOD 6010.13-M)	Assigned FTEs	66	67	64	66	66	65	67	67	65	67	
Contact Us	Available	67	63	57	66	61	67	59	65	59	60	

 The Six Sigma MEPRS Management Metrics (S2M3) workbook is an interactive tool containing seven key MEPRS-based performance metrics
 S2M3 is a blend of Direct Care and civilian industry benchmark metrics

- Updated Semi-annually on the FY

### MEPRS Policy & Business Rules Oversight

#### • DoD 6010.13M

- Provides Tri-Service guidance to all MEPRS reporting MTFs / DTFs
- -Contains policy and guidance for implementation of MEPRS program
- Download from/access Online: www.meprs.info

Chapter 1:	Background
Chapter 2:	Chart of Functional Cost Codes
Chapter 3:	Manpower & Expense Assignment
Chapter 4:	Reporting Requirements
Chapter 5:	MEPRS Issue Process
Appendices	Acronyms, Definitions, Guidelines for reporting FTE

### MEPRS Policy & Business Rules Oversight

- MEPRS Management Improvement Group (MMIG)
  - Established in 1999
  - Provides Functional Oversight
  - Tri-Service Integration, Standardization and Compliance
  - Automated Information System Oversight
  - Coordinates Policy / Action with Resource Management Steering Committee (RMSC)
  - Meeting Minutes and Information on www.meprs.info

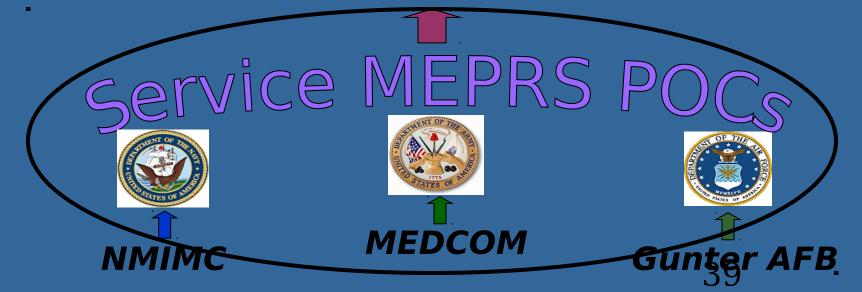
### **Issue Identification / Resolution**

HA / TMA Directorates

Work Charkerer Houseed









#### Question A.7.c)

"Has your Data Quality Manager/Assurance Team members attended the MEPRS Application and Data Improvement (MADI) course?"

## WWW.MEPRS.INFO

#### **FY06 MADI Schedule**

April 11 – 12 San Antonio June 13 – 14 San Antonio August 8 – 9 San Antonio

### WWW.MEPRS.INFO

MADI Workshops Info & Registration

Data Quality Surveillance MEWACS

2004 MEPRS Conference

MEPRS Manual DOD 6010.13-M MEPRS Newsletter MEPRS.INFOrmer

> Six Sigma MEPRS Management Metrics (S2M3)

MMIG Minutes & Briefings

Human System Interface (HSI)

MEPRS Learning Resources MEPRS Hifformation Web 43

#### Question C.1.c)

"Has the MTF DQ Manager / MEPRS Manager reviewed the following information presented in the current version MEPRS Early Warning And Control System Report?"

### WWW.MEPRS.INFO

MADI Workshops Info & Registration



#### 2004 MEPRS Conference

MEPRS Manual DOD 6010.13-M MEPRS Newsletter MEPRS.INFOrmer

> Six Sigma MEPRS Management Metrics (S2M3)

MMIG Minutes & Briefings

Human System Interface (HSI)

MEPRS Learning Resources MEPRS Information Web 45

Review Item 1. "EAS IV Repository MEPRS data load status and compliance with the 45-day reporting suspense or Service Guidance whichever is earlier.

If the facility has a pattern (2 or more) of flagged cells on this tab, have they corrected it or developed a plan to correct it? Provide an explanation..."

### DQMC Review List / Load Status

MEWACS Online 2.0 - Microsoft Internet Explorer provideo of



Select a Metric: Select a Metric: Data Load Status Summary Outliers MTF Data Profiles WWR/EAS IV WWR/EAS IV Outliers Allocation Test Allocation Detail Cost per Visit Cost per Disposition MTF Names

Data extracted January 20, 2006

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Welcome to MOL2

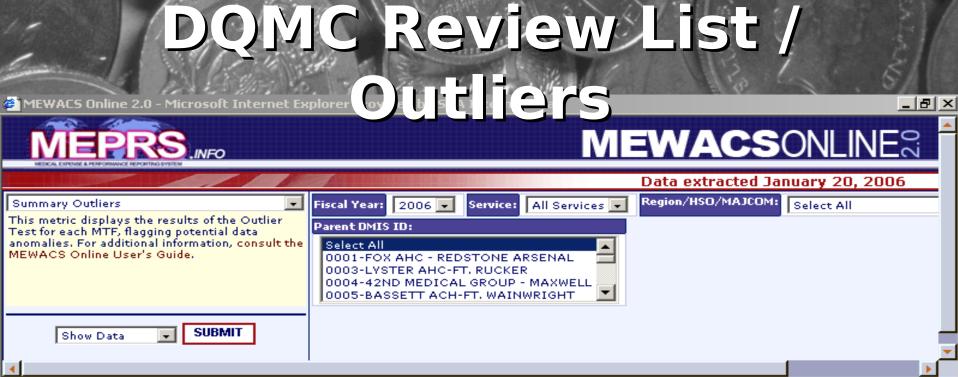
	Review Lis Status	The State
🛎 MEWACS Online 2.0 - Microsoft Internet E	plorer provided by SRA International	<u>_ 원 ×</u>
	ME	
NAME OF BRIDE OF STREET, STREE		Data extracted January 20, 2006
Data Load Status 🔹 💽	Fiscal Year: 2005 🗸 Service: All Services 🗸	Region/HSO/MAJCOM: All
EAS IV Repository and presents Completion and	Parent DMIS ID:	
Compliance statistics for each Service. For additional information, consult the MEWACS	0413-11TH MED GRP-BOLLING	
Online User's Guide.	0492-NDC CAMP PENDLETON	
	0606-HEIDELBERG MEDDAC 0607-LANDSTUHL REGIONAL MEDCEN	
Show Data - SUBMIT	Show: MTFs with flags 🗨	
Show Data		-
<u>र</u>	1	
	Data Load Status Results	

Percent of 2005 MEPRS Data Reported(Completion):								
Current Fiscal Month Compliance with 45-day Reporting Requirement(Compliance):	0.0%							
YTD Compliance with 45-day Reporting Requirement:								
Percent of MTFs with 3 or more late MEPRS data submissions:	100.0%							

i All for 2005 IS ID:	0413												
Name	Service	01	02	03	04	05	06	07	08	09	10	11	12
) 11TH MED GRP- BOLLING	F	3/3/2005	4/29/2005	5/6/2005	5/17/2005	5/20/2005	6/3/2005	6/16/2005	7/8/2005	8/1/2005	9/7/2005		

Review Item 2. "MTF-specific summary data outliers and variance assessments.

If the facility has any Prior Fiscal Year or Current Fiscal Year flagged cells on this tab, provide an explanation..."



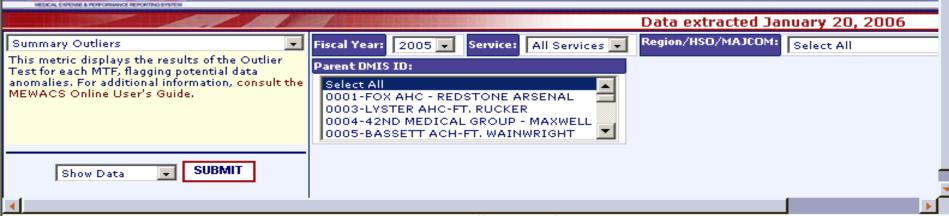
Welcome to MOL2

## DQMC Review List / Outliers

INFO

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MEWACSONLINE



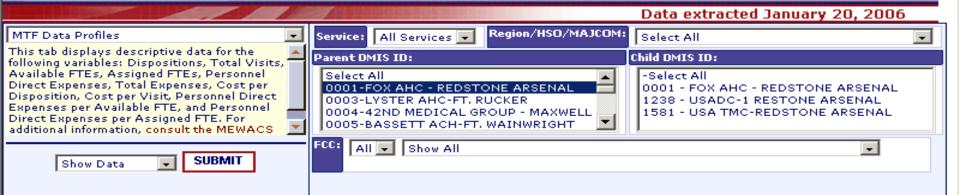
#### Summary Outliers Results

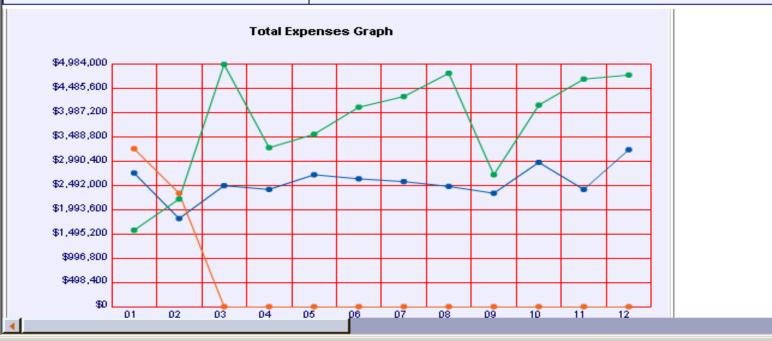
Because of T-Nex, expenses captured in the FCA account have been excluded from the Outlier test algorithm.									
Showing All Results for 0001, 0003, 0004, 0005, 0006, 0008, 0009, 0010, 0013, 0014, 0015, 0018, 0019, 0024, 0028, 2005 with DMIS ID: 0029, 0030, 0032, 0033, 0036, 0037, 0038, 0039, 0042, 0043, 0045, 0046, 0047, 0048, 0049, 💽									
Parent DMIS	Service	Dispositions	Total Visits	Personnel Direct Exp.	Total Expenses	Assigned FTEs	Available FTEs		
0001- FOX AHC - REDSTONE ARSENAL	A				01				
0003- LYSTER AHC-FT, RUCKER	A			02	12				
0004- 42ND MEDICAL GROUP - MAXWELL	F				11				
0005- BASSETT ACH-FT. WAINWRIGHT	A	08		01	09		06		
0006- 3rd MED GRP- ELMENDORF	F	04			11 ,12	01			

#### DQMC Review List / Outliers MEWACS Online 2.0 - Microsoft Internet Explorer provide



#### MEWACSONL





Review Item 3. "WWR-EAS IV total ambulatory visit comparison.

If the facility has any Prior Fiscal Year or Current Fiscal Year fiscal month data where WWR vs. EAS IV visit counts differ by greater than 5%, provide an explanation..."

### DQMC Review List / WWR-EASIN

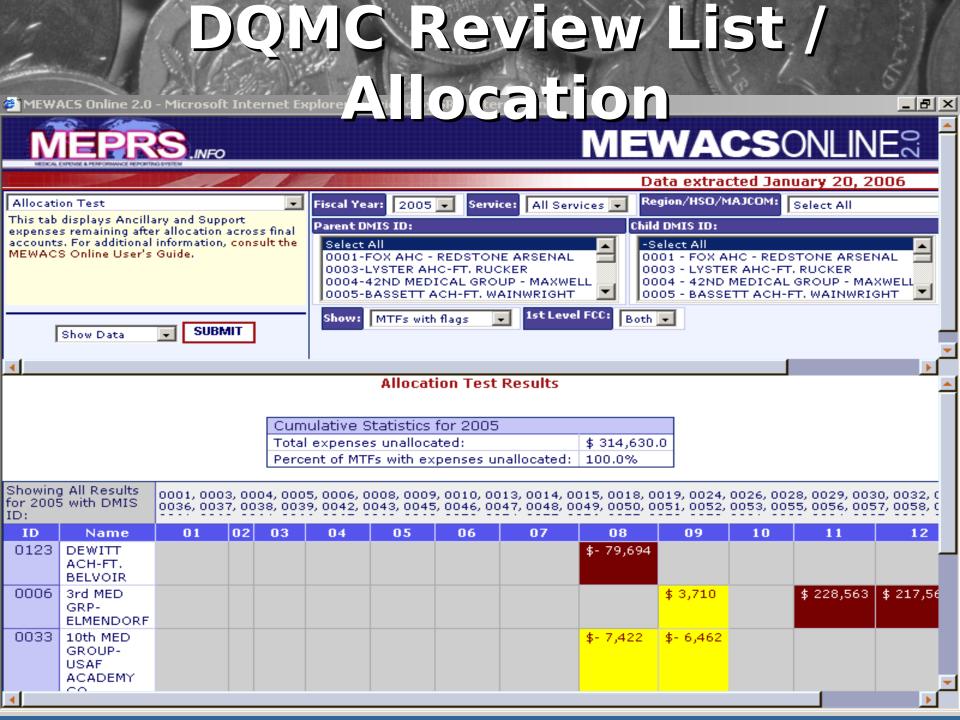


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REACK CORESCATE FOR CONVECTED ON THIS STRICT											
			D	ata extracted Janua	ry 20, 2006						
WWR/EAS IV Outliers	Fiscal Year:	2005 💽 Service:	All Services 👤 🥂	gion/HSO/MAJCOM: Se	lect All						
This tab displays MTFs whose WWR-EAS IV Total Visits disparity is greater than five	Parent DMIS	Parent DMIS ID: Child DMIS ID:									
percent. For additional information, consult the MEWACS Online User's Guide.	0003-LVS 0004-42N										
Show Data SUBMIT											
<u> </u>		i otai:	4,168	4,610	10.0%						
					i						
0363 311TH MED SQUAD-BROOKS		08 Total:	1,153	1,235	7.1% 7.1%						
			1,153	1,235							
0386 NBHC DAHLGREN		02	1,039	1,233	18.7%						
		03	1,120	1,255	12.1%						
		05	1,126	1,266	12.4%						
		Total:	3,285	3,754	14.3%						
0464 AHC FT. STORY		01	382	319	- 16.5%						
		02	352	285	- 19.0%						
		03	292	245	- 16.1%						
		04	352	308	- 12.5%						
		05	447	372	- 16.8%						
		06	611	530	- 13.3%						
		07	625	572	- 8.5%						
		08	520	481	- 7.5%						
		09	484	418	- 13.6%						
		10	430	381	- 11.4%						
		11	503	433	- 13.9%						
		Total:	4,998	4,344	- 13.1% 🖵						

Review Item 4. "Ancillary and Support expense allocation tests.

If the facility is flagged in Prior Fiscal Year or Current Fiscal Year due to incomplete allocation of ancillary or support expenses, provide an explanation...including projected date for submitting corrected data."



Company and the second s	Allocatio	113 / 21
Allocation Detail	Fiscal Year: 2005 - Service: All Services -	Data extracted January 20, 2006           Region/HSO/MAJCOM:           Select All
This tab presents a detailed summary of Ancillary and Support expenses remaining after allocation to final accounts. For additional information, consult the MEWACS Online User's Guide. Show Data <b>SUBMIT</b>	Parent DMIS ID: 0001-FOX AHC - REDSTONE ARSENAL 0003-LYSTER AHC-FT. RUCKER 0004-42ND MEDICAL GROUP - MAXWELL 0005-BASSETT ACH-FT. WAINWRIGHT 0006-3rd MED GRP-ELMENDORF	Child DMIS ID: -Select All 0006 - 3rd MED GRP-ELMENDORF 1792 - 3 MEDICAL GP/SGD - ELMENDORF 1961 - 3 MEDICAL GP/SGD - ELMENDORF 7100 - 19th ASF-ELMENDORF
•	1	
	Allocation Detail Results	

Showing All Results for 2005 with DMIS ID:		0006												
ID	Name	01	02	03	04	05	06	07	08	09	10	11	12	YTD Total
EDD	MINOR CONSTRUCTION									\$ 3,710		\$ 228,563	\$ 217,561	\$ 449,834

## Review

#### You should now:

- Understand the history and purpose of MEPRS
- ✓ Recognize the elements that comprise the MEPRS account structure
- $\checkmark$  Be familiar with the expense allocation process
- Understand how data quality affects MEPRS and be aware of the tools available to improve data quality
- Be able to locate and research MEPRS related information associated with the DQ Management Control Review List

### MEPRS: Our Cost Accounting System

## Questions?



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